

## SEALED RADIATION SOURCES MANAGEMENT IN AREAS AFFECTED BY WAR

(BOH/4/002) B5 New

MODEL PROJECT

### CORE FINANCING

YEAR	Experts		Group Activity	Equipment	Fellowships		Scientific Visits		Group Training	Sub-Contracts	Misc Comp.	TOTAL
	m/d	US \$	US \$	US \$	m/d	US \$	m/d	US \$	US \$	US \$	US \$	US \$
1997	1/15	19,800	0	30,000	2/0	6,300	0/0	0	0	0	0	56,100
1998	2/0	27,900	0	20,000	0/0	0	0/0	0	0	0	0	47,900

First Year Approved 1997

**OBJECTIVES:** The overall objective is mitigation of potential hazards resulting from damage during wartime to facilities housing radioactive materials. The specific goals of the project are to locate sealed sources in areas affected by war and to place them in safe interim storage.

**BACKGROUND:** Before the war, several hundred sealed radiation sources were installed throughout the country including some 120 sources for industrial applications, more than 500 lightning rods containing isotopes of Eu-152, Eu-154 and Co-60 with high activities, 30,000 ionizing smoke detectors and more than 20 sources for medical therapeutic applications. A large number of buildings containing these sources were destroyed or seriously damaged, some sources were removed and their fate is unknown. This situation increases the risk of exposure of individuals to radiation and hampers the reconstruction of buildings. There is therefore a need to relocate and retrieve to safe storage all lost or damaged radiation sources. A registry of sealed radiation sources and their users exists from before the war but there is no other accurate information at present on the number of users of radiation sources or their location. It is necessary to review and update the registry in order to determine the fate of all radioactive sources. The next task is to rescue all sources which are not under proper regulatory control and bring those which are in an unsafe condition to a temporary store. Preliminary work and assessment was carried out under the interregional project INT/9/143 in 1996.

**PROJECT PLAN:** A detailed sequence of necessary actions will be formulated and the responsibilities for the various tasks delineated among the national organizations involved. The Government will begin to collect information to update the registry of sealed radiation sources. At the same time, a site for an interim safe storage facility will be prepared. Beginning with the areas where access is possible, sources will be retrieved and brought under regulatory control. Where necessary, these sources will be transported to temporary safe storage. This process will be progressively extended to other areas of the country, once viable arrangements have been made.

**NATIONAL COMMITMENT:** The Government will ensure the establishment of an adequate temporary store, update the existing registry and begin to search for those sources which are missing or are under the debris of destroyed buildings. It is expected that the Ministry of Health will have overall responsibility with technical support provided by the Institute of Public Health and the Institute of Hygiene and Environmental Protection.

**AGENCY INPUT:** The Agency will provide expert assistance to upgrade the registry of sealed radiation sources and the interim store for radioactive waste. Expert advice will be given on how to identify spent sources, bring them under regulatory control and, if required, bring them to the safe store and train the staff in the use of the relevant equipment. The Agency will also assist the authorities in managing the project, advise on relevant radiation safety and handling equipment, provide training in handling spent sealed sources and in locating sources affected by actions of war.

**PROJECT IMPACT:** The most hazardous radiation sources affected by the war will be identified, located, brought under regulatory control and, if required, conditioned and brought to an interim store. The danger of contamination of the environment or radiological emergency will be diminished. Reconstruction and repair will be able to proceed without risk of overexposure to radiation.